(Practical Examination) **SECOND HALF 2019**

SUBJECT: SECURITY IN COMPUTING (SUBJECT CODE: USIT6P2)

Max. Marks: 50 Seat No:

| Sea | ιľ | NO: | | | | Max. Mark | s: 50 | |
|-----|-----|----------------------------------|----------------------|------------------|-------------------|-------------------------------------|--------|---------|
| 1. | Cr | eate the fol | lowing topolog | sy . | | | 20 | |
| | | 192.168.1.3 Server-PT PC-A | 2960-24TT 19 S1 R | | 1941 2960 R3 S | 192.168.3.3 24TT PC-PT 3 PC-C | | ONG |
| | Ac | ldressing ta | | I | 1 | | | 00 |
| | | Device | Interface | IP Address | Subnet Mask | Default Gateway | | |
| | | R1 | G0/1 | 192.168.1.1 | 255.255.255.0 | N/A | · 1 | Ť |
| | | | S0/0/0 (DCE) | 10.1.1.1 | 255.255.255.252 | N/A | | |
| | | R2 | S0/0/0 | 10.1.1.2 | 255.255.255.252 | N/A | | |
| | | | S0/0/1 (DCE) | 10.2.2.2 | 255.255.255.252 | N/A | | |
| | | R3 | G0/1 | 192.168.3.1 | 255.255.255.0 | N/A | | |
| | | 50.4 | S0/0/1 | 10.2.2.1 | 255.255.255.252 | N/A | | |
| | C | PC-A | NIC | 192.168.1.3 | 255.255.255.0 | 192.168.1.1 | | |
| 116 | ול | PC-C | NIC | 192.168.3.3 | 255.255.255.0 | 192.168.3.1 | | |
| 2. | Co | onfigure a z | one-based police | cy (ZPF) firewal | l on R3 | | 10 | |
| 3. | | | | | SSH, and a web | browser. | 10 | |
| 4. | Vi | va | | | | | 5 | |
| 5. | Joi | urnal | | | | | 5 | |
| | | | | | 2 | | , II'S | ee coll |
| | | | NI/SE | e colled | , vi | | | |

(Practical Examination) **SECOND HALF 2019**

SUBJECT: SECURITY IN COMPUTING (SUBJECT CODE: USIT6P2)

2

Max. Marks: 50

Seat No:

| | NTP Server | Syslog Server | | | | | |
|----------------|-------------|---------------|------------------|-----------------|--------------------------|--------|-----|
| | PCA Fa0 | Fa0 PCB | | | | | |
| | Fa0 | /2 Fa0/3 | © Se0/1/0 | Se0/1/1 | | | |
| | Swi | Fa0/1 | | © Se0/1/0 | | | |
| | | Gig0 | /0 1/0 | Gig0/0 Fa | 0/1 Fa0/2 Fa0 Switch1 | | |
| | | | R1 | | PCC | | 00, |
| Addre | essing Tabl | e | 1 | 1 | I | | |
| | Device | Interface | IP Address | Subnet Mask | Default Gateway | 1 | |
| | | G0/1 | 192.168.1.1 | 255.255.255.0 | N/A | | |
| | R1 | S0/0/0 (DCE) | 10.1.1.1 | 255.255.255.252 | N/A | | |
| | | S0/0/0 | 10.1.1.2 | 255.255.255.252 | N/A | | |
| | R2 | S0/0/1 (DCE) | 10.2.2.2 | 255.255.255.252 | N/A | - | |
| 0 | | G0/1 | 192.168.3.1 | 255.255.255.0 | N/A | - | |
| 9 | R3 | S0/0/1 | 10.2.2.1 | 255.255.255.252 | N/A | - | |
| | PC-A | NIC | 192.168.1.5 | 255.255.255.0 | 192.168.1.1 | - | |
| | PC-B | NIC | 192.168.1.6 | 255.255.255.0 | 192.168.1.1 | - | |
| | PC-C | NIC | 192.168.3.5 | 255.255.255.0 | 192.168.3.1 | - | |
| | + | | I | | 1 | | |
| | • | MD5 auther | | | | 10 | |
| Config Viva | gure NTP a | and configure | e routers to log | g messages to t | the Syslog Serv | ver 10 | |
| Journa | al | | | | | 5 | |
| | | | | | | | |
| | | | | | | | 01 |
| | | | | 0 | | .< | 5 |
| | | | scolled |) | the Syslog Serv | 40) | |
| | | | | | | 700 | |
| | | | CO | | | 0, | |
| | | | 2) | | | | |
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UNIVERSITY OF MUMBAI DRMATION TECHNOLOGY (Practical Examination SECOND 17 CT: 67 T.Y.B.Sc. INFORMATION TECHNOLOGY (Semester VI)

SUBJECT: SECURITY IN COMPUTING (SUBJECT CODE: USIT6P2)

Seat No:

on R1 Viva

Journal

3.

Max. Marks: 50

3

Create the following topology 20 Addressing Table Device Interface IPv6 Address/Prefix **Default Gateway** PC1 NIC 2001:DB8:1:10::10/64 FE80::1 PC2 NIC 2001:DB8:1:11::11/64 FE80::1 2001:DB8:1:10::1/64 Gig0/0 FE80::1 Gig0/1 2001:DB8:1:11::1/64 **R**1 FE80::1 Se0/1/0 2001:DB8:1:1::1/64 FE80::1 Se0/1/0 2001:DB8:1:1::2/64 FE80::2 R2 Se0/1/1 2001:DB8:1:2::2/64 FE80::2 Gig0/0 2001:DB8:1:30::1/64 FE80::3 Se0/1/0 2001:DB8:1:2::1/64 NIC 2001:DB8:1:30::30/64 Server Configure, apply and verify an ACL that will block HTTP and HTTPS access

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(Practical Examination) SECOND HALF 2019

SUBJECT: SECURITY IN COMPUTING (SUBJECT CODE: USIT6P2)

4

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Seat No: _____ Max. Marks: 50

| 1. | Create t | the follow | ing topology | | • | | | 20 |
|----|----------|------------|--|----------------|-----------------|---|---|-----|
| | | | 92.168.1.0/24 2960-24TT 1941 S1 R1 | 1941 R2 | 1941 296 | 24 PC-PT PC-B 192.168.2.3 168.3.0/24 0-24TT PC-PT PC-C 192.168.3.3 | | |
| | Address | sing Table | Interface | IP Address | Subnet Mask | Default Gateway | | |
| | | | G0/0 | 192.168.1.1 | 255.255.255.0 | N/A | | |
| | | R1 | S0/0/0 (DCE) | 10.1.1.2 | 255.255.255.252 | N/A | | 1 |
| | | | G0/0 | 192.168.2.1 | 255.255.255.0 | N/A | | . 5 |
| | | R2 | S0/0/0 | 10.1.1.1 | 255.255.255.252 | N/A | | |
| | | | S0/0/1 (DCE) | 10.2.2.1 | 255.255.255.252 | N/A | | |
| | | | G0/0 | 192.168.3.1 | 255.255.255.0 | N/A | 1 | |
| | | R3 | S0/0/1 | 10.2.2.2 | 255.255.255.252 | N/A | • | |
| | | PC-A | NIC | 192.168.1.3 | 255.255.255.0 | 192.168.1.1 | | |
| | 0. | PC-B | NIC | 192.168.2.3 | 255.255.255.0 | 192.168.2.1 | | |
| | 40 | PC-C | NIC | 192.168.3.3 | 255.255.255.0 | 192.168.3.1 | | |
| (| 2,50 | ļ | 2 | 1 | 1 | 1 | | |
| 2. | Configu | ire and ve | erify R1 to su | pport a site-t | o-site IPsec V | PN with R3. | | 20 |
| 2 | Viva | ~0) | , | | | | | 5 |
| 3. | | | | | | | | 5 |

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(Practical Examination) **SECOND HALF 2019**

SUBJECT: SECURITY IN COMPUTING (SUBJECT CODE: USIT6P2)

5

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| Sea | it No: _ | | | . \$ | V. | Max. M | arks: 5 | 50 |
|-----|---------------------|--------------------------|--------------|--------------|-----------------|-----------------|---------|----|
| 1. | Create the | e followir | ng topology | Lift | * | | | 20 |
| | Po | 2950-24 | 10.1.1.0 | | 10.2.2.0/30 | 2950-24 | PC-PT | |
| | Server-PT Syslog | S1 | R1 | | R3 | S3 | PC-C | |
| | Addressir | 192.168.1.0/ ng Table | 24 | | | 192.168.3.0/24 | | |
| | | Device | Interface | IP Address | Subnet Mask | Default Gateway | | |
| | | | G0/1 | 192.168.1.1 | 255.255.255.0 | N/A | | |
| | | R1 | S0/0/0 | 10.1.1.1 | 255.255.255.252 | N/A | | |
| | | | S0/0/0 (DCE) | 10.1.1.2 | 255.255.255.252 | N/A | X | |
| | | R2 | S0/0/1 (DCE) | 10.2.2.2 | 255.255.255.252 | N/A | | |
| | | | G0/1 | 192.168.3.1 | 255.255.255.0 | N/A | 1 | |
| | | R3 | S0/0/0 | 10.2.2.1 | 255.255.255.252 | N/A | | |
| | | Syslog | NIC | 192.168.1.50 | 255.255.255.0 | 192.168.1.1 | | |
| | S | PC-A | NIC | 192.168.1.2 | 255.255.255.0 | 192.168.1.1 | | |
| | | PC-C | NIC | 192.168.3.2 | 255.255.255.0 | 192.168.3.1 | | |
| | | | 5) | 1 | ı | ı | | |
| 2. | Enable IC | OS IPS | , - | | | | | 10 |
| 3. | Configure | logging | and verify I | PS | | | | 10 |
| 4. | Viva | | | | | | | 5 |
| 5 | Iournal | | | | | | | 5 |

(Practical Examination) **SECOND HALF 2019**

SUBJECT: SECURITY IN COMPUTING

(SUBJECT CODE: USIT6P2)

6

Max. Marks: 50 **Seat No: _____**

| | _ | | | | | | | ı | I |
|------------|---------------|-----------------|-----------|------------------|--------------------------|-----------------|---|-----|-----------|
| 1. | Creat | e the following | ng topolo | gy | | | | 20 | |
| | | 172. | Serve | G0/2 F | G0/1 172.22.34. S2 | 96/28 PC2 | | | V. Doolug |
| | Addr | essing Table | | | 5 | | | , i | |
| | | Device | Interface | IP Address | Subnet Mask | Default Gateway | | | |
| | | | G0/0 | 172.22.34.65 | 255.255.255.224 | N/A | K | | |
| | | R1 | G0/1 | 172.22.34.97 | 255.255.255.240 | N/A | | | |
| | | | G0/2 | 172.22.34.1 | 255.255.255.192 | N/A | | | |
| | 20 | Server | NIC | 172.22.34.62 | 255.255.255.192 | 172.22.34.1 | | | |
| 0 | | PC1 | NIC | 172.22.34.66 | 255.255.255.224 | 172.22.34.65 | | | |
| | | PC2 | NIC | 172.22.34.98 | 255.255.255.240 | 172.22.34.97 | | | |
| , | | 0 | | | | | | | |
| 2. | | | | permit FTP and | | | | 10 | |
| 3. | | • | plement | ation. PC1 (Only | FTP). PC2(Onl | ly HTTP) | | 10 | |
| 4. 5. • | Viva Journ | | | | | | | 5 | |
| J. | Journ | 141 | | | | | | | .16 |
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UNIVERSITY OF MUMBAI OCTATOR TECHNOLOGY T.Y.B.Sc. INFORMATION TECHNOLOGY (Semester VI)

(Practical Examination) **SECOND HALF 2019**

SUBJECT: SECURITY IN COMPUTING (SUBJECT CODE: USIT6P2)

Seat No: Max. Marks: 50

| 1. | Create the following topology | 20 | |
|-----|--|----|--------|
| | Fa0/1 Fa0/2 Fa0/2 Gig0/0 Router0 | | Doolig |
| | Fa0 | | |
| | PC1 | | |
| | Addressing Table | | |
| | Device Interface IP Address Subnet Mask Default Gateway | | |
| | R1 Gig0/0 192.168.1.1 255.255.255.0 N/A | | |
| | PC0 NIC 192.168.1.2 255.255.255.0 192.168.1.1 | | |
| 116 | PC1 NIC 192.168.1.3 255.255.255.0 192.168.1.1 | | |
| 0), | | | |
| 2. | Configure a local user account on R1 and configure authenticate on the console and vty lines using local AAA. | 10 | |
| 3 | Verify local AAA authentication from the R1 console and the PC0 client and | 10 | |
| | PC1 Client. | | .\(0) |
| 4. | Viva | 5 | |
| 5. | Journal | 5 | C |
| | Journal College Colleg | du | |

(Practical Examination) **SECOND HALF 2019**

SUBJECT: SECURITY IN COMPUTING (SUBJECT CODE: USIT6P2)

Max. Marks: 50 **Seat No: _____**

| | 192 | 10.1.1. | 0/30 1941 R2 | 10.2.2.0/30 | 192.168.3.0/24 | | | |
|---------------|--------------------------------------|----------------------|-----------------|---|---------------------------|-------|---------------|-----|
| s | | 50-24TT 194 S1 R1 | | 1941 R3 | 2960-24TT PC-P S3 PC-C | | | |
| Add | ressing Ta | ble | | | | | | |
| | Device | Interface | IP Address | Subnet Mask | Default Gateway | | | 000 |
| | | G0/1 | 192.168.1.1 | 255.255.255.0 | N/A | | | |
| | R1 | S0/0/0 (DCE) | 10.1.1.1 | 255.255.255.252 | N/A | - | . 6 | |
| | | S0/0/0 | 10.1.1.2 | 255.255.255.252 | N/A | . 4 | | |
| | R2 | S0/0/1 (DCE) | 10.2.2.2 | 255.255.255.252 | N/A | 1 | | |
| | | Lo0 | 192.168.2.1 | 255.255.255.0 | N/A | | | |
| | D2 | G0/1 | 192.168.3.1 | 255.255.255.0 | N/A | | | |
| 20 | R3 | S0/0/1 | 10.2.2.1 | 255.255.255.252 | N/A | | | |
| 90 | PC-A | NIC | 192.168.1.3 | 255.255.255.0 | 192.168.1.1 | | | |
| | PC-C | NIC | 192.168.3.3 | 255.255.255.0 | 192.168.3.1 | | | |
| from to PC | PC-C, the C-A, which fy ACL fu | e management | station. PC-C | R1, R2, and R3 is also used for SMTP, FTP, ar | connectivity te | sting | 10 10 5 | |
| Jour | | | | | | | 5 | |
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(Practical Examination) SECOND HALF 2019

SUBJECT: SECURITY IN COMPUTING (SUBJECT CODE: USIT6P2)

Seat No: _____ Max. Marks: 50

| | | | | - // - | | | |
|------|---------------------------|-------------------|---------------------|--|------------------------|-----|----------|
| 1. | Create the fo | ollowing top | oology | 1 | | 10 | |
| 1. | Create the 10 | onowing top | 1 | Se 0110 C Se 0 CD UG-FT CDU GO FR 0 Se 0010 C Se 0 CD UG-FT CDU GO FR 0 FB 0011 FB 0011 FB 0012 FB 0012 FB 0012 FB 0012 FB 0013 FB 0012 FB 0013 FB 0013 FB 0013 FB 0013 FB 00 | 790 790 | 10 | , Dooing |
| | A ddmassin a | Table | 2 C3 PC-PT C4 | DI DE DE | PC-PT D4 | . 1 | |
| | Addressing Devices | Interface | IP Address | Subnet Mask | Default Catavay | | |
| | Devices | | 192.168.1.1 | 255.255.255.0 | Default Gateway N/A | | |
| | R1 | Gig0/1 Se0/0/0 | 209.165.200.1 | 255.255.255.0 | N/A N/A | | |
| | C1 | NIC | 10.1.1.10 | 255.255.255.0 | 10.1.1.1 | | |
| | C1 | NIC | 10.1.1.11 | 255.255.255.0 | 10.1.1.1 | | |
| | C2 | NIC NIC | 10.1.1.12 | 255.255.255.0 | 10.1.1.1 | | |
| | C3 C4 | NIC | 10.1.1.12 | 255.255.255.0 | 10.1.1.1 | | |
| 116 | D1 | NIC | 10.1.1.14 | 255.255.255.0 | 10.1.1.1 | | |
| | D1 | NIC | 10.1.1.15 | 255.255.255.0 | 10.1.1.1 | | |
| 5 | D3 | NIC | 10.1.1.16 | 255.255.255.0 | 10.1.1.1 | | |
| | D3 | NIC | 10.1.1.17 | 255.255.255.0 | 10.1.1.1 | | |
| | DŦ | TVIC | 10.1.1.17 | | | | |
| 2. • | Assign the (| Central swite | ch as the root brid | dge. | | 10 | |
| 3. | | | rameters to prev | ent STP manipul | ation attacks. | 10 | |
| 4. | | | orevent CAM tab | ole overflow attac | cks. | 10 | |
| 5. | Viva | <u> </u> | - | | | 5 | 60 |
| 6. | Journal | | | | | 5 | 0, |
| | | | seecolle | 20° | ation attacks. | OUT | |

(Practical Examination) **SECOND HALF 2019**

SUBJECT: SECURITY IN COMPUTING (SUBJECT CODE: USIT6P2)

10

Seat No: _____

Max. Marks: 50

| | | 1 0 | 11 1 | | | • | |
|----------|------------|-----------------|---------------|---|------------------------|------|------------|
| 1. | Cre | ate the fo | llowing topol | logy | | 20 | • |
| | | PC1 | ٠, | © Se0/1/0 R2 Se0/1/1 Se0/1/1 R3 Gigo/1 R3 | Switch2 Serve | ır | |
| | | PC2 | | | | | |
| | Add | dressing T | | TD () 11 /D (t) | D a b G d | , | 0, |
| | | Device | Interface | IPv6 Address/Prefix | Default Gateway | | 00 |
| | | PC1 | NIC | 2001:DB8:1:10::10/64 | FE80::1 | | N . |
| | | PC2 | NIC | 2001:DB8:1:11::11/64 | FE80::1 | | |
| | | | Gig0/0 | 2001:DB8:1:10::1/64 | FE80::1 | | |
| | | R1 | Gig0/1 | 2001:DB8:1:11::1/64 | FE80::1 | | |
| | | | Se0/1/0 | 2001:DB8:1:1::1/64 | FE80::1 | 1 | |
| | ~ | 3 _{D2} | Se0/1/0 | 2001:DB8:1:1::2/64 | FE80::2 | 1 | |
| .16 | | R2 | Se0/1/1 | 2001:DB8:1:2::2/64 | FE80::2 | 1 | |
| 0)) | | D2 | Gig0/0 | 2001:DB8:1:30::1/64 | FE80::3 | 1 | |
|) | | R3 | Se0/1/0 | 2001:DB8:1:2::1/64 | FE80::3 | 1 | |
| | | Server | NIC | 2001:DB8:1:30::30/64 | FE80::3 | 1 | |
| * | 1 | | | L | | | |
| 2. | ~ | | pply and veri | fy an ACL that will block | ICMP access on R3 | 20 | 2 |
| 3. 4. | Viv Jou | a rnal | | | | 5 | -O' |
| | | | | | | | |
| | | | | see college | ICIVII access on RS | | 500 |
| | | | | 1160 | | 00 | |
| | | | | 60// | | 0/13 | |
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(Practical Examination) SECOND HALF 2019

SUBJECT: SECURITY IN COMPUTING (SUBJECT CODE: USIT6P2)

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Addressing Table

| Devices | Interface | IP Address | Subnet Mask | Default Gateway |
|---------|-----------|---------------|--------------------|------------------------|
| R1 | Gig0/1 | -0) | | |
| K1 | Se0/0/0 | 209.165.200.1 | 255.255.255.0 | N/A |
| C2 | NIC | 192.168.10.1 | 255.255.255.0 | 192.168.10.100 |
| C3 | NIC | 192.168.10.2 | 255.255.255.0 | 192.168.10.100 |
| C4 | NIC | 192.168.5.1 | 255.255.255.0 | 192.168.5.100 |
| D1 | NIC | 192.168.5.2 | 255.255.255.0 | 192.168.5.100 |
| D2 | NIC | 192.168.5.3 | 255.255.255.0 | 192.168.5.100 |
| D3 | NIC | 192.168.5.4 | 255.255.255.0 | 192.168.5.100 |
| D4 | NIC | 192.168.10.3 | 255.255.255.0 | 192.168.10.100 |

| 2. | Enable trunking and configure security on the trunk link. | 10 |
|----|--|-----|
| 3. | Create a new management VLAN (VLAN 20) and attach a management PC to | 10 |
| | that VLAN. Verify connectivity of the management PC to all switches. | |
| 4. | Viva | 5 |
| 5. | Journal | 5 |
| | aursee college ii M. Door | Oll |

(Practical Examination) **SECOND HALF 2019**

SUBJECT: SECURITY IN COMPUTING

(SUBJECT CODE: USIT6P2)

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Max. Marks: 50 **Seat No: _____**

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|------|----------------|--|-------------------------|---|-----------------|----------------------------|---------------|-----|-----------|
| 1. | Create the fol | lowing to | opology | 1. | | | | 20 | |
| | | | | F | | | | | |
| | | | 10.1.1.0/30 | 1941 R2 VLAN 2 | 10.2.2.0/30 | | | | |
| | | | | (outside) 209.165.200.224 | 1/29 | | | | |
| | | | 03 | — | | | | | |
| | | | 1941 | | 1 | 41 | | | |
| | | | R1 | ASA | | U | | | |
| | | 192. 168. 2. 0/2 ⁴ VLAN 3 (dmz) | 2960 24TT | 2960 24TT | . 2960 | 172.16.3.0/24 24TT 3 | | | |
| | | | 1 | Ţ | | | | | 0. |
| | | | | .168.1.0/24 VLAN 1 (inside) PC-PT | | | | | |
| | | | Server-PT DMZ Server | (inside) PC-PT PC-B | PC | C-PT C-C | | | |
| | Addressing T | | 7.17.75.15 | | (2) | | | | |
| | Č | Device | Interface | IP Address | Subnet Mask | Default Gateway | | | |
| | | | G0/0 | 209.165.200.225 | 255.255.255.248 | N/A | | | |
| | | R1 | S0/0/0 (DCE) | 10.1.1.1 | 255.255.255.252 | N/A | | | |
| | | | S0/0/0 | 10.1.1.2 | 255.255.255.252 | N/A | | | |
| | | R2 | S0/0/1 (DCE) | 10.2.2.2 | 255.255.255.252 | N/A | _ | | |
| | | D2 | G0/1 | 172.16.3.1 | 255.255.255.0 | N/A | _ | | |
| | .01 | R3 | S0/0/1 | 10.2.2.1 | 255.255.255.252 | N/A | _ | | |
| | .0\ | ASA | VLAN 1 (E0/1) | 192.168.1.1 | 255.255.255.0 | NA | _ | | |
| 116 | | ASA | VLAN 2 (E0/0) | 209.165.200.226 | 255.255.255.248 | NA | - | | |
| | _ | ASA | VLAN 3 (E0/2) | 192.168.2.1 | 255.255.255.0 | NA | _ | | |
| | | DMZ Server | NIC | 192.168.2.3 | 255.255.255.0 | 192.168.2.1 | _ | | |
| | | PC-B | NIC | 192.168.1.3 | 255.255.255.0 | 192.168.1.1 | Ī | | |
| | | PC-C | NIC | 172.16.3.3 | 255.255.255.0 | 172.16.3.1 | | | |
| 2. | Configure bas | sic ASA | settings an | nd interface | security le | vels using (| CLI | 10 | |
| 3. * | | | | | | | ing CLI. Test | 10 | |
| | connectivity t | | | | | | | | .10 |
| 4. | Viva | | | | | | | 5 | |
| 5. | Journal | | | | | | | 5 | C |
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(Practical Examination) SECOND HALF 2019

SUBJECT: SECURITY IN COMPUTING (SUBJECT CODE: USIT6P2)

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14

Seat No: Max. Marks: 50

| 1. | For the given topology (Exam1.pkt) | 20 |
|----|--|----|
| | a) Configure OSPF MD5 authentication | |
| | b) Configure NTP and configure routers to log messages to the Syslog | |
| | Server | |
| 2. | For the given topology (Exam3.pkt) | 20 |
| | a) Enable trunking and configure security on the trunk line. | |
| | b) Verify connectivity between VLAN10 and VLAN20 | |
| 3. | Viva | 5 |
| 4. | Journal | 5 |

UNIVERSITY OF MUMBAI T.Y.B.Sc. INFORMATION TECHNOLOGY (Semester VI) (Practical Examination) SECOND HALF 2019

SUBJECT: SECURITY IN COMPUTING (SUBJECT CODE: USIT6P2)

Seat No: ____ Max. Marks: 50

| 1. | For the given topology (Exam4.pkt) | 20 |
|----|--|----|
| | a) Configure ACL to allow access to routers R1, R2, and R3 to only | |
| | be permitted from PC0, the management station. PC0 is also used | |
| | for connectivity testing to Server0, which is a server providing | |
| | DNS and HTTPS services. | |
| 2. | For the given topology (Exam8.pkt) | 20 |
| | a) PC0 needs web access and PC1 needs FTP access provided by the | |
| | server. | |
| | b) Both computers are able to ping the server but not each other. | < |
| | c) Configure, apply and verify the ACL. | |
| 3. | Viva | 5 |
| 4. | Journal | 5 |

(Practical Examination) SECOND HALF 2019

SUBJECT: SECURITY IN COMPUTING

15

16

(SUBJECT CODE: USIT6P2)

Seat No: Max. Marks: 50 For the given topology (Exam4.pkt) 20 a) Configure ACL to allow access to routers R1, R2, and R3 to only be permitted from PC0, the management station. PC0 is also used for connectivity testing to Server0, which is a server providing SMTP and FTP services. 3. For the given topology (Exam1.pkt) 2. 20 a) Configure NTP and configure routers to log messages to the Syslog Server b) Configure R4 to support SSH connection. Viva 5. Journal

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(Practical Examination) SECOND HALF 2019

SUBJECT: SECURITY IN COMPUTING (SUBJECT CODE: USIT6P2)

Seat No: ____ Max. Marks: 50

| 1. | For the given topology (Exam5.pkt) | 20 |
|----|--|----|
| | a) Enable IPS on R1 to scan traffic entering 192.168.1.0 network. Configure the router to identify the syslog server to receive logging messages by displaying correct time and date in messages. b) Enable IPS to produce alert and drop ICMP echo reply packets inline. | |
| 2. | For the given topology (Exam6.pkt) | 20 |
| 2. | a) Assign central switch as root bridge | |
| | b) Secure spanning-tree parameters to prevent STP manipulation attacks | |
| | c) Enable port security to prevent CAM overflow attacks | 1 |
| | | |
| 3. | Viva | 5 |
| 4. | Journal | 5 |

(Practical Examination) SECOND HALF 2019

SUBJECT: SECURITY IN COMPUTING (SUBJECT CODE: USIT6P2) 17

| Seat No: Max. Mark | | 50 |
|--------------------|---|----|
| 1. | For the given topology (Exam4.pkt) a) Configure a zone-based policy (ZPF) firewall on R1. b) Verify ZPF firewall functionality using ping, SSH, and a web browser | 20 |
| 2. | For the given topology (Exam3.pkt) a) Enable trunking and configure security on the trunk line. b) Verify connectivity between VLAN10 and VLAN20 | 20 |
| 3. | Viva | 5 |
| 4. | Journal | 5 |

UNIVERSITY OF MUMBAI T.Y.B.Sc. INFORMATION TECHNOLOGY (Semester VI)

(Practical Examination) SECOND HALF 2019

SUBJECT: SECURITY IN COMPUTING (SUBJECT CODE: USIT6P2)

18

Max. Marks: 50

| O | -0 | |
|----|---|----|
| 1. | For the given topology (Exam7.pkt) | 20 |
| | a) Configure devices on one LAN to remotely access devices in another | |
| | LAN using the SSH protocol. | |
| | b) Besides ICMP, all traffic should be denied. | |
| X | | |
| 2. | For the given topology (Exam2.pkt) | 20 |
| - | a) Configure a local user account on R1 and R2 and configure | |
| | authentication on the console and vty lines using local AAA. | |
| | b) Verify local AAA authentication from the R1 and R2 console on | |
| | PC0 client and PC1 Client | |
| | | |
| 3. | Viva | 5 |
| 1 | Journal | 5 |

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